

GAME MACHINE

BACKGROUND OF THE INVENTION

[0001] Field of the Invention

[0002] The present invention relates to a game machine having a game board which is constructed so that the game machine is capable of changing-over between a first playable state where a first game is playable and a second playable state where a second game is playable.

[0003] Related Art

[0004] *Pachinko* (a Japanese upright pinball game) has heretofore been popular among many people as an amusement which is readily enjoyable. In recent years, various types of *pachinko* machines have been developed, such as a *pachinko* machine wherein an image display apparatus for displaying a gaming image is incorporated in a game board, and a *pachinko* machine wherein an image display apparatus is constructed separately from a game board for the purpose of making it easy to see a gaming image (by way of example, a *pachinko* game machine (1) disclosed in JP-A-2002-282493). As such, *pachinko* fans can enjoy playing their favorite *pachinko* machines.

[0005] However, conventional *pachinko* machines have the following problems. *Pachinko* machines are usually installed only in a *pachinko* hall. Accordingly, to play a *pachinko* machine, people must go to a *pachinko* hall.

[0006] On the other hand, *pachinko* fans would like to readily enjoy playing with *pachinko* machines even at home. Nevertheless, *pachinko* machines have housings and other components formed for exclusive use in a *pachinko* hall, which requires that they be installed in the shape of islands within

the *pachinko* hall. It is therefore difficult to install *pachinko* machines in ordinary houses, resulting in the problem that conventional *pachinko* machines cannot satisfy the wishes of *pachinko* fans. In this case, a method is also considered wherein a *pachinko* machine for home use is constructed with its housing, etc. installable in ordinary houses. The *pachinko* machine for home use, however, is large-sized and comparatively expensive as a domestic game machine and can be used for playing only the *pachinko* game. Accordingly, even if the fan can enjoy playing with the *pachinko* machine at home, it is difficult to amuse all the other family members including children, who want to enjoy games other than the *pachinko* game. Therefore, in purchasing a *pachinko* machine for home use, it is difficult to gain support from the family members other than the fan.

[0007] It is accordingly difficult to adopt this method.

[0008] The present invention has been made in view of such problems, and has for one object to provide a game machine with which a plurality of games can be enjoyed with a single machine.

SUMMARY

[0009] In order to accomplish the above object, a game machine according to the present invention comprises a game board which is constructed so that a game ball is movable on a front surface side thereof, and a game mechanism which includes a shooting portion for shooting the game ball onto the front surface side of the game board, and game components each arranged on the game board so that the game ball moved on a front surface of the game board may be capable of winning the prize; wherein the game

mechanism is constructed so as to be capable of changing-over, at least, a first playable state where a first game is playable under a condition in which an inclination angle of the front surface of the game board relative to a virtual horizontal plane exceeds a predetermined angle, and a second playable state where a second game is playable under a condition in which the inclination angle is equal to or less than the predetermined angle.

[0010] The above mentioned game machine according to the present invention comprises an attitude change-over/holding mechanism which is constructed so as to be capable of altering the inclination angle based on a change-over of an installation attitude of the game machine body which includes the game board and the game mechanism, and holding the game machine body at installation attitudes throughout the change-over.

[0011] The above mentioned game machine according to the present invention comprises a first control portion which, when supplied with a control instruction for changing-over the playable state, causes the attitude change-over/holding mechanism to change-over the installation attitude of the game machine body.

[0012] Further, the above mentioned game machine according to the present invention comprises a first holding portion which arranges and holds the game components for the first game, at a first predetermined position in the game board in the first playable state, and a second holding portion which arranges and holds the game components for the second game, at a second predetermined position in the game board in the second playable state.

[0013] The above mentioned game machine according to the present invention comprises a second control portion which, when supplied with a

control instruction for changing-over the game machine into the first playable state, causes the first holding portion to arrange the game components for the first game, at the first predetermined position, and which, when supplied with a control instruction for changing-over the game machine into the second playable state, causes the second holding portion to arrange the game components for the second game, at the second predetermined position.

[0014] The above mentioned game machine according to the present invention comprises a storage portion which stores therein first image data concerning images for the first game, and second image data concerning images for the second game, an image display portion which displays the images for the respective games, and a display control portion which causes the image display portion to display the image for the first game based on the first image data, in the first playable state, and which causes the image display portion to display the image for the second game based on the second image data, in the second playable state.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] Fig. 1 is a front view showing the schematic construction of a game machine 1 according to an embodiment of the present invention.

[0016] Fig. 2 is a plan view of the game machine body W in a state where a pinball game is playable.

[0017] Fig. 3 is a block diagram showing the construction of the game machine 1.

[0018] Fig. 4 includes sectional views of a game board 2 and a movement mechanism 33 showing a change-over arrangement for the game

components by the movement of a moving plate 33a.

[0019] Fig. 5 includes sectional views of the game board 2 and the movement mechanism 33 showing a change-over arrangement for a game component by the movement of a moving plate 33b.

[0020] Fig. 6 includes sectional views of the game board 2 and the movement mechanism 33 showing a change-over arrangement for the game components by the movement of a moving plate 33c.

[0021] Fig. 7 includes side views of the game machine 1 showing the change-over states of the installation attitude of the game machine body W.

Detailed Description

[0022] Now, the preferred embodiments of a game machine according to the present invention will be described with reference to the accompanying drawings.

[0023] First, the construction of the game machine 1 will be described with reference to the drawings.

[0024] The game machine 1 is so formed that the installation attitude of the game machine body W (refer to Fig. 7) can be changed-over, and it is constructed so that two sorts of games corresponding respectively to the individual installation attitudes, for example, a *pachinko* game (first game) and a pinball game (second game) can be played. Particularly, as shown in Fig. 3, the game machine 1 includes a game board 2 (refer to Fig. 1), a game mechanism 3, a control unit 4, an attitude change-over/holding mechanism 5, a display unit 6 and a ball payout mechanism (not shown). In this case, the game board 2, the game mechanism 3, the control unit 4 and the display unit 6 are

accommodated in the game machine body W. The ball payout mechanism is dividedly accommodated in both the game machine body W and a foundation F (refer to Fig. 7).

[0025] The game board 2 is generally formed to be rectangular in a front view as shown in Fig. 1. The game board 2 is also formed with a plurality of holes H, H ... as shown in Fig. 4. The holes H, H ... have the function of protrusively arranging in front of a board face (front surface) 2a, the distal end sides of game components for the *pachinko* game (game components for the first game), such as a plurality of nails 35a, 35a ..., a start chucker 35b, a big hit prize hole (attacker) 35c, hit prize holes 35d, 35d and a frame member 36 as shown in Fig. 1, and the distal end sides of game components for the pinball game (game components for the second game), such as a plurality of bumpers 37a, 37a ..., flippers 37b, 37b ... and frame members 38, 38, 38 as shown in Fig. 2. In this case, as shown in Figs. 4 through 6, the distal end parts of the game components close the corresponding holes H when these game components have retreated onto the rear surface side of the game board 2. As shown in Fig. 1, the display unit 6 capable of displaying, for example, an image G for the *pachinko* game (graphic for the first game) is disposed at the central part of the game board 2. Further, a door 21 in which transparent glass 21a is fitted is disposed in front of the game board 2. In this case, as shown in the same figure, a game selection switch SW1, which serves to select the game to-be-played, and a game start switch SW2, which is operated in starting the game, are disposed on the left lower side of the door 21.

[0026] As shown in Fig. 3, the game mechanism 3 includes shooting mechanisms (shooting portions) 31, 32, a movement mechanism 33, and the

game components mentioned above. The shooting mechanism 31 is constructed so as to be capable of shooting a game ball for the *pachinko* game onto the side of the board face 2a of the game board 2, and it is disposed on the rear surface side of the game board 2. The shooting mechanism 32 is constructed so as to be capable of shooting a game ball for the pinball game onto the side of the board face 2a, and it is disposed on the rear surface side of the game board 2. The movement mechanism 33 includes moving plates 33a, 33b, 33c shown in Figs. 4 through 6, and a driving section (not shown) for driving the moving plates 33a, 33b, 33c. The moving plate 33a constitutes a first holding portion in the present invention, together with the moving plate 33b. As shown in Fig. 4, the moving plate 33a is constructed with the nail 35a, start chucker 35b (refer to Fig. 1), hit prize holes 35d, 35d and frame member 36 (refer to Fig. 1) fixed thereto. Besides, the moving plate 33b is constructed with the big hit prize hole 35c fixed thereto as shown in Fig. 5. The moving plate 33c corresponds to a second holding portion in the present invention. As shown in Fig. 6, the moving plate 33c is constructed with the plurality of bumpers 37a, 37a ..., flippers 37b, 37b (refer to Fig. 2) and frame members 38, 38, 38 (refer to Fig. 2) fixed thereto. Here, the moving plates 33a, 33b, 33c are respectively disposed on the rear side of the game board 2, and they are moved in forward and backward directions on the rear side of the game board 2 (in the direction approaching the rear side of the game board 2 and the direction retreating therefrom) by the driving section. In this case, as shown in Figs. 4 through 6, when the moving plates 33a, 33b (or 33c) have been respectively moved forward, the corresponding game components fixed to these moving plates 33a, 33b (or 33c) have their distal end sides protrusively arranged in front of the

board face 2a and have their protrusive state held. The driving section drives the moving plates 33a, 33b (or 33c) in accordance with control signals outputted by the control unit 4.

[0027] As shown in Fig. 3, the control unit 4 is constructed including a main control portion 41, and a main storage portion 42 which stores the operating programs of the main control portion 41, etc. therein. The main control portion 41 corresponds to a first control portion and a second control portion in the present invention, and it integrally controls the game mechanism 3, attitude change-over/holding mechanism 5 and display unit 6. In this case, when a control signal for selecting the *pachinko* game (a control instruction for changing-over a playable state) has been outputted by the game selection switch SW1, the main control portion 41 complies with the instruction and causes the attitude change-over/holding mechanism 5 to change-over the installation attitude of the game machine body W so that, as shown in the left upper side of Fig. 7, the inclination angle of the board face 2a of the game board 2 of the game machine body W relative to a virtual horizontal plane (hereinbelow, also termed as "inclination angle of the board face 2a") may become 90 degrees (or substantially 90 degrees, and hereinbelow, also termed as "inclination angle for the *pachinko* game"), and it also causes the movement mechanism 33 of the game mechanism 3 to arrange (protrude) the game components for the *pachinko* game at a predetermined position (a first predetermined position in the present invention) in the game board 2. On the other hand, when a control signal for selecting the pinball game has been outputted by the game selection switch SW1, the main control portion 41 complies with the instruction and causes the attitude change-over/holding

mechanism 5 to change-over the installation attitude of the game machine body W so that, as shown in the left lower side of Fig. 7, the inclination angle of the board face 2a may become within a range from about 6 degrees to about 7 degrees (hereinbelow, also termed as "inclination angle for the pinball game"), and it also causes the movement mechanism 33 to arrange (protrude) the game components for the pinball games at a predetermined position in the game board 2 (a second predetermined position in the present invention).

[0028] When the game start switch SW2 has been operated, the main control portion 41 controls the game mechanism 3 and the display unit 6 so as to establish an operation mode which conforms to the selected *pachinko* game or pinball game. Particularly, in a state where the *pachinko* game is being played, the main control portion 41 causes the ball payout mechanism to pay out a predetermined number of game balls when a game ball has entered a hit prize hole 35d. Also, the main control portion 41 executes a lottery when a game ball has entered the start chucker 35b. On this occasion, when a big hit has appeared, the main control portion 41 causes the game mechanism 3 to open the gate of the big hit prize hole 35c, and when a game ball has entered the big hit prize hole 35c, the main control portion 41 causes the ball payout mechanism to pay out a predetermined number of game balls. Further, the main control portion 41 outputs commands C in accordance with playing states such as the lottery and the big hit, and thereby causes the display unit 6 to display various graphics G.

[0029] On the other hand, in a state where the pinball game is being played, the main control portion 41 causes the game mechanism 3 to actuate the bumpers 37a, 37a Also, when a game ball has collided against the

bumpers 37a, 37a ... (this corresponds to prize-winning in the present invention), the main control portion 41 adds up points previously stipulated for the respective bumpers 37a, so as to calculate a score, and it supplies the display unit 6 with a command C for displaying an image G for the pinball game (an image for the second game), indicating the score.

[0030] As shown in Fig. 7, the attitude change-over/holding mechanism 5 includes an attitude change-over portion 51, a support portion 52 and a screw jack 53, and it is constructed so as to be capable of holding the game machine body W.

[0031] Each of the attitude change-over portion 51 and the support portion 52 has one end mounted on the foundation F, and has its other end mounted on the game machine body W. The screw jack 53 is a jack of, for example, the electrically driven type. As shown in the figure, the body of the screw jack 53 is attached to the predetermined position of the foundation F, and the distal end of the center shaft thereof is attached to the attitude change-over portion 51. In this case, the screw jack 53 expands or contracts the length of the center shaft on the distal end side by the rotation of a motor, thereby to actuate the attitude change-over portion 51. With the attitude change-over/holding mechanism 5, when a control signal has been outputted by the main control portion 41, the screw jack 53 actuates the attitude change-over portion 51 in accordance with the control signal, thereby to change-over the installation attitude of the game machine body W so that the inclination angle of the panel face 2a may become the inclination angle for the *pachinko* game or the inclination angle for the pinball game, and it also holds the game machine body W at installation attitudes throughout the change-over. By the way, as

shown in Fig. 1, a control handle 31a for controlling the shooting of a game ball based on the shooting mechanism 31, and ball receivers 31b, 31b for accumulating game balls paid out are mounted on the front panel of the foundation F (i.e., base).

[0032] As shown in Fig. 3, the display unit 6 is constructed including a liquid crystal panel 61, a display control portion 62, a RAM 63, a display procedure data storage portion 64, a VRAM 65 and an image data storage portion 66. The liquid crystal panel 61 corresponds to an image display portion in the present invention, and it displays various images G on the basis of displaying image data Dg outputted by the display control portion 62. The display control portion 62 executes various image display processes in accordance with the commands C outputted by the main control portion 41 of the control unit 4, thereby to generate the displaying image data Dg for displaying the images G and the like and to output the generated data to the liquid crystal panel 61. The RAM 63 temporarily stores the arithmetic results of the display control portion 62 therein. The display procedure data storage portion 64 stores therein display procedure data Ds in which the designations of image data for use in the generations of the displaying image data Dg, the designations of positions and display time periods on a display screen for displaying the images, etc. are described, the operating programs of the display control portion 62, and so forth.

[0033] The VRAM 65 stores therein the displaying image data Dg generated by the display control portion 62. The image data storage portion 66 corresponds to a storage portion in the present invention, and it stores therein various image data Dp, Dp (image data such as numerals) for generating the

displaying image data Dg for the respective games. In this case, the game machine 1 is constructed so as to be capable of playing the two sorts of games (the *pachinko* game and the pinball game), so that the image data storage portion 66 stores therein the image data Dp on the *pachinko* game (first image data), and the image data Dp on the pinball game (second image data).

[0034] Next, the operation of the game machine 1 will be described with reference to the drawings. Incidentally, it is assumed that, in an initial state, the inclination angle of the board face 2a of the game board 2 be the inclination angle for the pinball game as shown in the left lower side of Fig. 7.

[0035] First, in playing the *pachinko* game, a player selects the *pachinko* game by operating the game selection switch SW1. On this occasion, the game selection switch SW1 outputs a control signal, and the main control portion 41 complies with the control signal and supplies the attitude change-over/holding mechanism 5 with a control signal for changing-over the installation attitude of the game machine body W so that the inclination angle of the board face 2a may become the inclination angle for the *pachinko* game. Next, the attitude change-over/holding mechanism 5 changes-over the installation attitude in the sequence of arrows A1, A2 and A3 indicated in Fig. 7, in accordance with the control signal outputted by the main control portion 41. Subsequently, the main control portion 41 supplies the movement mechanism 33 of the game mechanism 3 with a control signal for retreating the game components for the pinball game, from a predetermined position in the game board 2. Next, the movement mechanism 33 complies with the control signal outputted by the main control portion 41 and moves the moving plate 33c backwards so that, as shown in the left side of Fig. 6, the distal end surface of

each of the bumpers 37a, 37a ..., flippers 37b, 37b (not shown) and frame members 38, 38, 38 (not shown) fixed to the moving plate 33c may become flush with the board face 2a of the game board 2. Thus, the bumpers 37a, 37a ..., flippers 37b, 37b and frame members 38, 38, 38 are respectively retreated, and the holes H, H ... of the game board 2 are closed by the distal ends thereof.

[0036] Next, the main control portion 41 supplies the movement mechanism 33 with a control signal for arranging (protruding) the game components for the *pachinko* game, at a predetermined position in the game board 2. Subsequently, the movement mechanism 33 complies with the control signal outputted by the main control portion 41 and moves the moving plate 33a forwards so that, as shown in the left side of Fig. 4, the distal end of each nail 35a, start chucker 35b, hit prize hole 35d and frame member 36 (not shown) may protrude from the board face 2a of the game board 2, and it also moves the moving plate 33b forwards so that, as shown in the left side of Fig. 5, the distal end of the big hit prize hole 35c may protrude from the board face 2a. Thus, as shown in Fig. 1, the nails 35a, start chucker 35b, big hit prize hole 35c, hit prize holes 35d and frame member 36 are arranged at the predetermined position in the board face 2a of the game board 2, and the game mechanism 3 is changed-over into a state where the *pachinko* game is playable.

[0037] Next, the game start switch SW2 is operated. After the operation of the game start switch SW2, the main control portion 41 of the control unit 4 supplies the display unit 6 with a command C for displaying, for example, an image G for the *pachinko* game in an initial state shown in Fig. 1. Subsequently, the display control portion 62 of the display unit 6 executes an image display process in accordance with the command C. In the image

display process, the display control portion 62 reads out display procedure data Ds designated by the command C, from the display procedure data storage portion 64. Next, the display control portion 62 generates displaying image data Dg within the VRAM 65 in such a way that image data Dp, Dp ... necessary for generating the displaying image data Dg are read out from the image data storage portion 66 in accordance with the display procedure data, whereupon images corresponding to the image data Dp, Dp ... are virtually depicted on the virtual plane of the VRAM 65 (the image data Dp are stored). Subsequently, the display control portion 62 outputs the displaying image data Dg within the VRAM 65, to the liquid crystal panel 61. Next, the liquid crystal panel 61 displays the image G of the initial state for the *pachinko* game on the basis of the outputted displaying image data Dg.

[0038] Next, when a game ball has entered the hit prize hole 35d after the start of the play of the *pachinko* game, the main control portion 41 causes the ball payout mechanism to pay out game balls, for example, ten game balls. Subsequently, when a game ball has entered the start chucker 35b, the main control portion 41 causes the ball payout mechanism to pay out game balls, for example, five game balls and also executes a lottery. On this occasion, the main control portion 41 outputs a command C for displaying an image G which indicates a lottery state and in which numerals 1 through 9, for example, are scrolled. After the output of command C, the display control portion 62 executes the image display process stated above and outputs displaying image data Dg, whereby the image G indicating the lottery state is displayed on the liquid crystal panel 61.

[0039] Subsequently, when a big hit has appeared as the result of the

lottery, the main control portion 41 supplies the display control portion 62 with a command C for displaying an image G which indicates a "big hit" formed of an image where the numerals of the big hit (for example, numerals "777") flicker. After the output of command C, the display control portion 62 executes an image display process and outputs displaying image data Dg, whereby the image G indicating the "big hit" is displayed on the liquid crystal panel 61. Next, the main control portion 41 causes the game mechanism 3 to open the gate of the big hit prize hole 35c fifteen times by way of example.

[0040] On this occasion, when a game ball has entered the big hit prize hole 35c, the main control portion 41 causes the ball payout mechanism to pay out game balls, for example, fifteen game balls. Next, when the opening and closing of the big hit prize hole 35c (in this example, fifteen times) have ended (the big hit has ended), the main control portion 41 outputs a command C for displaying an ending image which renders the ending of the big bonus. After output of command C, the display control portion 62 executes an image display process and outputs displaying image data Dg, whereby the ending image is displayed on the liquid crystal panel 61. Thereafter, each time the game ball enters the start chucker 35b, the above processing is executed.

[0041] Next, when playing the pinball game after the play of the *pachinko* game has been ended, the game selection switch SW1 is operated to select the pinball game. After the operation of game selection switch SW1, the game selection switch SW1 outputs a control signal. Next, in accordance with the control signal, the main control portion 41 supplies the attitude change-over/holding mechanism 5 with a control signal for changing-over the installation attitude of the game machine body W so that the inclination angle of

the board face 2a may become the inclination angle for the pinball game. Subsequently, the attitude change-over/holding mechanism 5 changes-over the installation attitude of the game machine body W in the sequence of arrows B1, B2 and B3 indicated in Fig. 7, in accordance with the control signal outputted by the main control portion 41. Next, the main control portion 41 supplies the movement mechanism 33 with a control signal for retreating the game components for the *pachinko* game, from the predetermined position in the game board 2.

[0042] Next, the movement mechanism 33 complies with the control signal outputted by the main control portion 41 and moves the moving plate 33a backwards (in the direction of coming away from the game board 2) so that, as shown in the right side of Fig. 4, the distal end surface of each of the nail 35a, start chucker 35b, hit prize hole 35d and frame member 36 (not shown) fixed to the moving plate 33a may become flush with the board face 2a of the game board 2, and it also moves the moving plate 33b backwards so that, as shown in the right side of Fig. 5, the distal end surface of the big hit prize hole 35c fixed to the moving plate 33b may become flush with the board face 2a of the game board 2. Thus, the game components for the *pachinko* game are respectively retreated, and the holes H, H ... of the game board 2 are closed. Subsequently, the main control portion 41 supplies the game mechanism 33 with a control signal for arranging (protruding) the game components for the pinball game, at a predetermined position in the game board 2. After the output of control signal, the movement mechanism 33 moves the moving plate 33c forwards (in the direction of coming near to the game board 2) so that, as shown in the right side of Fig. 6, the distal end of each of the bumpers 37a, 37a ..., flippers 37b, 37b

(not shown) and frame members 38, 38, 38 (not shown) fixed to the moving plate 33c may protrude from the board face 2a of the game board 2. Thus, as shown in Fig. 2, the bumpers 37a, 37a ..., flippers 37b, 37b and frame members 38, 38, 38 are arranged at the predetermined position in the game board 2, and the game mechanism 3 is changed-over into a state where the pinball game is playable.

[0043] Next, the game start switch SW2 is operated. After the operation of game start switch SW2, the main control portion 41 supplies the display control portion 62 with a command C for displaying an image G for the pinball game in an initial state. Next, the display control portion 62 executes the image display process stated above and outputs displaying image data Dg, whereby the image G for the pinball game in the initial state is displayed on the liquid crystal panel 61 as shown in Fig. 2. Subsequently, when a game ball has been shot onto the far side (upper side in Fig. 2) of the board face 2a of the game board 2 by the shooting mechanism 32 after the start of the play of the pinball game, this game ball moves on the board face 2a toward the near side (lower side in Fig. 2). On this occasion, when the game ball has collided against the bumper 37a (has won a prize), the bumper 37a repels the game ball and also outputs a score signal to the main control portion 41. Next, the main control portion 41 calculates a score on the basis of the score signal and also supplies the display control portion 62 with a command C for displaying an image G indicating the score. Subsequently, the display control portion 62 executes the image process stated above, whereby the image G indicating the score is displayed on the liquid crystal panel 61. Thereafter, each time a game ball collides against the bumper 37a, the above process is executed. In this

case, the image G can be changed variously in such a way that a display size, a pattern layout, a display color, etc. are changed in accordance with the score. Hereafter, each time the game selection switch SW1 is operated, the main control portion 41 changes-over the game mechanism 3 into the state where the *pachinko* game or the pinball game is playable.

[0044] In this manner, according to the game machine 1, the game mechanism 3 is constructed so as to be capable of changing-over the state where the *pachinko* game is playable with the inclination angle of the board face 2a of the game board 2 being the inclination angle for the *pachinko* game, and the state where the pinball game is playable with the inclination angle of the board face 2a being the inclination angle for the pinball game, so that the two sorts of games; the *pachinko* game mainly directed toward adults, and the pinball game mainly directed toward children can be played with the single game machine 1. Accordingly, not only a *pachinko* fan, but also all other family members including children can satisfactorily enjoy themselves with the single game machine.

[0045] The attitude change-over/holding mechanism 5 changes-over the installation attitude of the game machine body W, thereby to alter the inclination angle of the board face 2a, and it also holds the game machine body W at installation attitudes throughout the change-over, so that the installation attitude can be easily changed-over without lifting up or supporting the game machine body W. Moreover, with the game machine 1, when the control signal has been outputted by the game selection switch SW1, the main control portion 41 causes the attitude change-over/holding mechanism 5 to change-over the installation attitude of the game machine body W. According to the game

machine 1, consequently, the state where the *pachinko* game is playable, and the state where the pinball game is playable can be automatically changed-over merely by the operation of the game selection switch SW1, so that even a child or an elder person can change-over the game machine for the favorite game reliably and easily.

[0046] The game machine includes the moving plates 33a, 33b for arranging and holding the game components for the *pachinko* game, at the predetermined position in the game board 2, and the moving plate 33c for arranging and holding the game components for the pinball game, at the predetermined position in the game board 2, so that when the large number of required game components are fixed to the moving plates 33a, 33b, 33c beforehand, the game components can be reliably and easily arranged at the predetermined positions merely by moving the moving plates 33a, 33b, 33c. In this case, when the main control portion 41 has inputted the control signal for changing-over the game machine to the *pachinko* game, to the game mechanism 3, the game components for the *pachinko* game are arranged at the predetermined position, and when it has inputted the control signal for changing-over the game machine to the pinball game, the game components for the pinball game are arranged at the predetermined position, whereby the game components can be automatically arranged at the predetermined position merely by the operation of the game selection switch SW1, and hence, the game machine can be changed-over in a short time into the state where the favorite game is playable. Since the game machine includes the liquid crystal panel 61 which respectively displays the images G for the *pachinko* game and the image G for the pinball game, the image corresponding to each game can

be variously displayed in accordance with the states of winning prizes or scores, so that all the family members can play the games more joyfully.

[0047] Incidentally, the present invention is not restricted to the embodiment thereof as described above. By way of example, the embodiment of the present invention has been described by exemplifying the construction in which the main control portion 41 causes the attitude change-over/holding mechanism 5 to automatically change-over the installation attitude of the game machine body W, however, it is also possible to adopt a construction in which the installation attitude of the game machine body W is manually changed-over. In this case, it is also possible to adopt a construction in which the moving plate 33a, 33b, 33c are moved forwards or backwards in interlocking with the manual change-over of the installation attitude. Alternatively, it is also possible to adopt a construction in which only the moving plate 33a, 33b, 33c are manually moved without being interlocked with the change-over of the installation attitude of the game machine body W. Further, the embodiment of the present invention has been described on the example in which the state where the inclination angle of the board face 2a is 90 degrees (or substantially 90 degrees) is stipulated as the state where the *pachinko* game is playable, while the state where the inclination angle of the board face 2a lies within the range of about 6 degrees to about 7 degrees is stipulated as the state where the pinball game is playable, however, it is also possible by way of example that a state where the inclination angle of the board face 2a exceeds 45 degrees (i.e., a predetermined angle) is stipulated as the state where the *pachinko* game is playable, while a state where the inclination angle is 45 degrees or less is stipulated as the state where the pinball game is playable.

[0048] Further, although the embodiment of the present invention has been described by exemplifying the game machine 1 with which the two sorts of games of the *pachinko* game and the pinball game can be played, the sorts and number of playable games are not restricted thereto, and it is also possible to construct a game machine playable with at least two or more sorts of games by bringing various games, for example, a smart ball game and an arrange ball game into correspondence with the installation attitudes of the game machine body W. Besides, although the embodiment of the present invention has been described on the example in which the image display portion is constructed of the liquid crystal panel 61, the image display portion can also be constructed of a projector mechanism which is capable of displaying an image G on the game board 2 by projecting light from the rear surface thereof.

[0049] As described above, in accordance with a game machine according to the present invention, a game mechanism is constructed so as to be capable of changing-over a first playable state where a first game is playable under a condition in which the inclination angle of the front surface of a game board relative to a virtual horizontal plane exceeds a predetermined angle, and a second playable state where a second game is playable under a condition in which the inclination angle is the predetermined angle or less, whereby two sorts of games, for example, the first game mainly intended for adults and the second game mainly intended for children can be played with the single game machine. Accordingly, all family members including the adults and the children can satisfactorily enjoy themselves with the single game machine.

[0050] An attitude change-over/holding mechanism changes-over the installation attitude of the game machine body so as to alter the inclination

angle, and also holds the game machine body at installation attitudes throughout the change-over, whereby the installation attitude can be easily changed-over without lifting up or supporting the game machine body.

[0051] When a control instruction for changing-over the playable state has been inputted, the attitude change-over/holding mechanism is caused to change-over the installation attitude of the game machine body, whereby the state where the first game is playable and the state where the second game is playable can be changed-over merely by, for example, the operation of a game selection switch which outputs the control instruction, so that even a child or an elderly person can reliably and easily change-over the game machine for a favorite game.

[0052] Further, the game machine includes a first holding portion which arranges and holds game components for the first game, at a first predetermined position in the game board, and a second holding portion which arranges and holds game components for the second game, at a second predetermined position in the game board, so that the game components can be reliably and easily arranged at the predetermined positions merely by moving both holding portions, in such a way that the large number of required game components are fixed to the first holding portion and the second holding portion beforehand.

[0053] When a control instruction for changing-over the game machine into the first playable state has been inputted, the first holding portion is caused to arrange the game components for the first game, at the first predetermined position, and when a control instruction for changing-over the game machine into the second playable state has been inputted, the second

holding portion is caused to arrange the game components for the second game, at the second predetermined position, whereby the game components can be automatically arranged at the predetermined position merely by, for example, the operation of the game selection switch which outputs the control instruction, so that the game machine can be changed-over in a short time into the state where the favorite game is playable.

[0054] Each of an image for the first game and an image for the second game is displayed on an image display portion, whereby the image corresponding to each game can be variously displayed in accordance with the states of winning prizes or scores, so that all the family members can play the games more joyfully.

[0055] The entire disclosure of Japanese Patent Application No.2002-340887 filed November 25, 2002 is incorporated by reference.